

CLAIMS

1. Process for measuring a speed of an induction motor operating under an applied null frequency status and under sensorless control, characterised in that
5 it exploits a step transition between two levels of a static stator current phasor to induce electric effects on phase voltages and from whose analysis the rotor speed is obtained.
2. Process according to claim 1 under a control loss status, characterised in that it provides passing firstly from a frequency in which control has been lost, to
10 the applied null frequency status (namely to the application of a stator current phasor unmoving in space), and then exploiting a following step transition towards a different stator current phasor width in order to induce electric effects on phase voltages and from whose analysis the rotor speed can be obtained.
3. Process for controlling an electric vehicle, actuated by an induction motor,
15 placed on a ramp with released accelerator and characterised in that, starting from an applied null frequency status, it activates a cyclic check procedure of adequacy and usefulness of the stationing phasor by time repeatedly measuring the motor speed with the process according to claim 1.
4. Process for controlling an electric vehicle according to claim 3, characterised
20 in that it degrades a stationing current with a slow ramp by cyclically verifying adequacy and usefulness of decreasing current levels by repeatedly measuring the motor speed with the process of claim 1.
5. Process for controlling an electric vehicle, actuated by an induction motor, placed on a ramp with released accelerator according to claim 4 and that, when
25 the stationing current results not adequate, recovers the motor control by applying a frequency that is next to the measured speed and makes it ramp-

degrade towards a low frequency value to accompany the motor along the descent.

6. Process for controlling an electric vehicle, actuated by an induction motor, placed on a ramp with released accelerator according to claim 5 with which it is possible to go to the applied null frequency status when the sign of the torque developed during the low-frequency controlled descent goes from negative (braking) to positive (motive) for the descent end.

7. Process for controlling an electric vehicle, actuated by an induction motor under the control loss status (high slip and low motion torques) according to claim 2 and that recovers the motor control by applying a frequency that is next to the measured speed and then delivers the control to a line algorithm that modulates the re-tuning value frequency towards a value controlled by the accelerator.